eclipse™
RGB

c(MET)® us

CHAUVET®
Value · Innovation · Performance
It's Green Thinking

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1. BEFORE YOU BEGIN

What Is Included

- 1 x Eclipse™ RGB
- 1 x Power cable
- 1 x Warranty Card
- 1 x User Manual

Unpacking Instructions

Immediately upon receipt, carefully unpack this product and check the container to make sure you have received all the parts indicated above in good condition.

Claims

If the container or the material inside the container (this product and any other accessory included) appears damaged from shipping, or shows signs of mishandling, notify the carrier immediately, not CHAUVET®, upon receipt of the damaged merchandise. Failure to do so in a timely manner may invalidate your claim with the carrier. In addition, retain the container and all the packing material for inspection.

For other issues such as missing components or parts, damage not related to shipping, or concealed damage, file a claim with CHAUVET® within seven (7) days of receiving the merchandise.

Manual Conventions

CHAUVET® manuals use the following conventions to differentiate certain types of information from the regular text.

Convention	➢ MEANING
<Menu>	A key to be pressed on the product's control panel
1~512	A range of values
50/60	A set of values of which only one can be chosen
Settings	A menu option not to be modified (for example, showing the operating mode/current status)
MENU > Settings	A sequence of menu options to be followed
ON	A value to be entered or selected

Icons

This manual uses the following icons to indicate information that requires special attention on the part of the user.

Icons	➢ MEANING
⚠	This paragraph contains critical installation, configuration or operation information. Failure to comply with this information may render the product partially or completely inoperative, cause damage to the product or cause harm to the user.
ⓘ	This paragraph contains important installation or configuration information. Failure to comply with this information may prevent the product from functioning correctly.
📝	This paragraph reminds you of useful, although not critical, information.

Safety Instructions

Please read the following notes carefully because they include important safety information about the installation, usage, and maintenance of this product.

- Keep this User Manual for future consultation. If you sell this product to another user, be sure that they also receive this document.
- Always make sure that the voltage of the outlet to which you are connecting this product is within the range stated on the decal or rear panel of the product.
- This product is for indoor use only! To prevent risk of fire or shock, do not expose this product to rain or moisture.
- Make sure there are no flammable materials close to the unit while operating.
- Always install this product in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Always disconnect this product from the power source before cleaning it or replacing fuse.
- Make sure to replace the fuse with another of the same type and rating.
- If mounting it overhead, always secure this product to a fastening device using a safety chain.
- The maximum ambient temperature (Ta) is 104° F (40° C). Do not operate this product at higher temperatures.
- In the event of a serious operating problem, stop using the unit immediately. Never try to repair the unit. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center.
- Never connect this product to a dimmer pack.
- Make sure the power cord is not crimped or damaged.
- Never disconnect the power cord by pulling or tugging on the cord.
- Never carry a product from the power cord or any moving part. Always use the hanging/mounting bracket or the handles.
- Always avoid direct eye exposure to the light source when this product is on.
- Lasers can be hazardous and have unique safety considerations. Permanent eye injury and blindness is possible if lasers are used incorrectly. Pay close attention to each safety REMARK and WARNING statement in this user manual. Read all instructions carefully BEFORE operating this device.

- **Avoid direct eye contact with laser light. Never intentionally expose your eyes or others to direct laser light.**
- **This laser product can potentially cause instant eye injury or blindness if laser light directly strikes the eyes.**
- **It is illegal and dangerous to shine this laser into audience areas, where the audience or other personnel could get direct laser beams or bright reflections into their eyes.**
- **It is a US Federal offense to shine any laser at aircraft.**
- **Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.**
- **There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact the dealer nearest to you.**
- **Avoid direct eye contact with laser light. Never intentionally expose your eyes or others to direct laser light.**

Non Interlocked Housing Warning

- This unit contains high power laser devices internally.
- Do not open the laser housing, due to potential exposure to unsafe levels of laser radiation.
- The laser power levels, accessible if the unit is opened, can cause instant blindness, skin burns, and fires.

Laser Safety Notes

⚠ **STOP AND READ ALL THE LASER SAFETY NOTES BELOW**

Laser Light is different from any other light sources with which you may be familiar. The light from this product can potentially cause eye injury if not set up and used properly. Laser light is thousands of times more concentrated than light from any other kind of light source. This concentration of light can cause instant eye injuries, primarily by burning the retina (the light sensitive portion at the back of the eye). Even if you cannot feel "heat" from a laser beam, it can still potentially injure or blind you or your audience. Even very small amounts of laser light are potentially hazardous even at long distances. Laser eye injuries can happen quicker than you can blink.

It is incorrect to think that because these laser entertainment products split the laser into hundreds of beams that the laser beam is scanned out in high speed, that an individual laser beam is safe for eye exposure. This laser product uses dozens of milliwatts of laser power (Class 3B levels internally) before it splits into multiple beams (Class 3R levels). Many of the individual beams are potentially hazardous to the eyes.

It is also incorrect to assume that because the laser light is moving, it is safe. This is not true. Nor, do the laser beams always move. Since eye injuries can occur instantly, it is critical to prevent the possibility of any direct eye exposure. In the laser safety regulation, it is not legal to aim Class 3R lasers in areas which people can get exposed. This is true even if it is aimed below people's faces, such as on a dance floor.

- Do not operate the laser without first reading and understanding all safety and technical data in this manual.
- Always set up and install all laser effects so that all laser light is at least 3 meters (9.8 feet) above the floor on which people can stand. See "Proper Usage" section later in this manual.
- After set up, and prior to public use, test laser to ensure proper function. Do not use if any defect is detected. Do not use if laser emits only one or two laser beams rather than dozens/hundreds, as this could indicate damage to the diffraction grating optic, and could allow emission of higher laser levels above Class 3R.
- Do not point lasers at people or animals.
- Never look into the laser aperture or laser beams.
- Do not point lasers in areas in which people can potentially get exposed, such as uncontrolled balconies, etc.
- Do not point lasers at highly reflective surfaces, such as windows, mirrors and shiny metal. Even laser reflections can be hazardous.
- Never point a laser at aircraft, this is a federal offense.
- Never point un-terminated laser beams into the sky.
- Do not expose the output optic (aperture) to cleaning chemicals.
- Do not use laser if the laser appears to be emitting only one or two beams.
- Do not use the laser if the housing is damaged, open, or if the optics appear damaged in any way.
- Never open the laser housing. The high laser power levels inside of the protective housing can start fires, burn skin and will cause instant eye injury.
- Never leave this device running unattended.
- The operation of a class 3R laser show is only allowed if the show is controlled by a skilled and well-trained operator, familiar with the data included in this manual.
- The legal requirements for using laser entertainment products vary from country to country. The user is responsible for the legal requirements at the location/country of use.
- Always use appropriate lighting safety cables when hanging lights and effects overhead.

Laser Safety Label Reproduction

LASER LIGHT
AVOID DIRECT EYE EXPOSURE
CLASS 3R LASER PRODUCT
<5 mW, 532 nm & 650 nm, 15 mSec - CW

CLASSIFIED PER EN/IEC 60825-1:2007

CHAUVET Lighting
5200 NW 108th Avenue
Sunrise, FL 33351

Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.

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(MET) c us
E113093

Complies with
UL 1573
CSA C22.2 No. 166

CE

RoHS

PRODUCT NAME:	Eclipse™ RGB
ITEM CODE:	10060474
FUSE:	T1A 250V
LIGHT SOURCE:	LASER
ORIGIN:	MADE IN P.R.C.
MANUFACTURING DATE:	

THIS APPLIANCE MUST BE GROUNDED
USE ONLY FUSE OF SAME TYPE & RATING
NOT FOR RESIDENTIAL USE
IMPROPRE A L'USAGE DOMESTIQUE
FOR INDOOR USE ONLY
EMPLACEMENTS SECS
DISCONNECT POWER BEFORE SERVICING

USA/ CANADA
Power: AC 100~125 V, 60 Hz, 43 W

WORLDWIDE
Power: AC 100~240 V, 50 Hz, 49 W

EXPLANATORY, MANUFACTURER'S ID & CERTIFICATION LABEL

LASER HAZARD WARNING LABEL

LASER APERTURE

LASER APERTURE LABEL

CAUTION
CLASS 3B LASER LIGHT WHEN OPEN
AVOID EXPOSURE TO THE BEAM
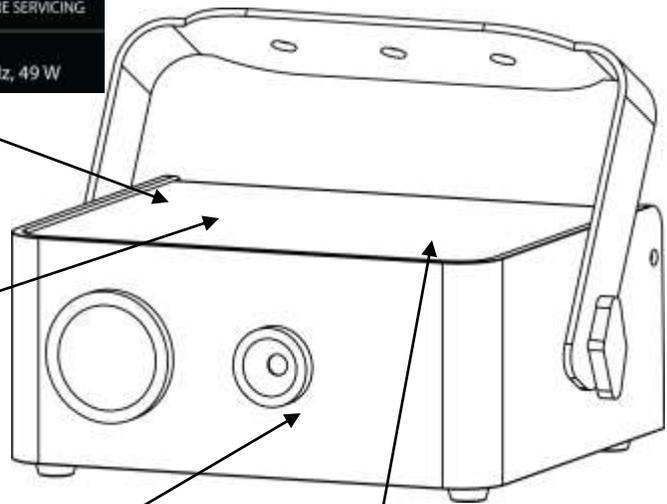
NON INTERLOCKED HOUSING LABEL

LASER EXPOSURE

Laser light - Avoid direct eye contact!

Further guidelines and safety programs for safe use of lasers can be found in the ANSI Z136.1 Standard "For Safe Use of Lasers", available from the Laser Institute of America: www.laserinstitute.org. Many local governments, corporations, agencies, military and others, require all lasers to be used under the guidelines of ANSI Z136.1. Laser Display guidance can be obtained via the International Laser Display Association: www.laserist.org.

Laser Emission Data

Laser Classification	Class 3R
Red Laser Medium	LD GaAlAs 650nm, typical
Green Laser Medium	DPSS Nd:YVO4, 532nm
Beam Diameter	<5mm at aperture
Pulse Data	All pulses < 4Hz (>0.25sec)
Divergence (each beam)	<2 mrad
Divergence (total light)	<160 degrees
Laser Power of Each Beam from Aperture*	<5mW

*As measured under IEC measurement conditions for classification.

Laser Compliance Statement

This laser product complies with EN/IEC 60825-1 Ed 2, 2007-03, and US FDA/CDRH FLPPS via the terms of Laser Notice No. 50 dated June 24, 2007. This laser device is classified 3R. (Class 3R is the international equivalent of US Class IIIa). No maintenance is required to keep this product in compliance with laser performance standards.

2. INTRODUCTION

Product Overview

Bracket adjustment knob (1 of 2)

DMX
OUTPUT
INPUT
CONTROL
888
001-502
MIC
MENU UP DOWN ENT
POWER OUT
POWER IN: 100~240VAC 50/60HZ

LED output

Laser Aperture

Product Dimensions

9.3in
236mm

7.9in
180mm

6.4in
163mm

120⊠
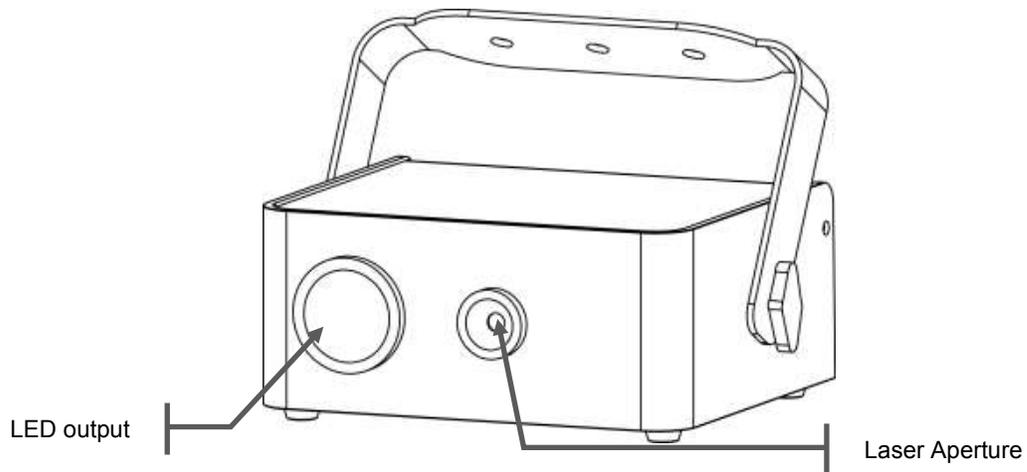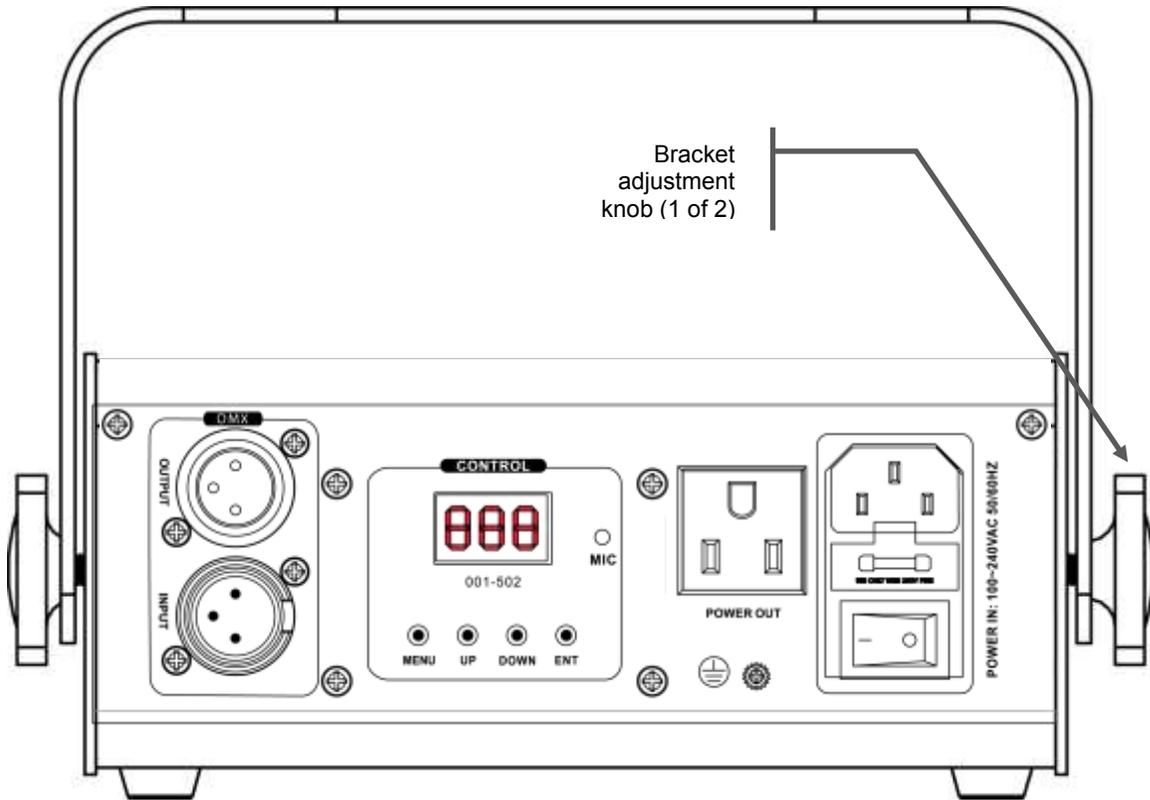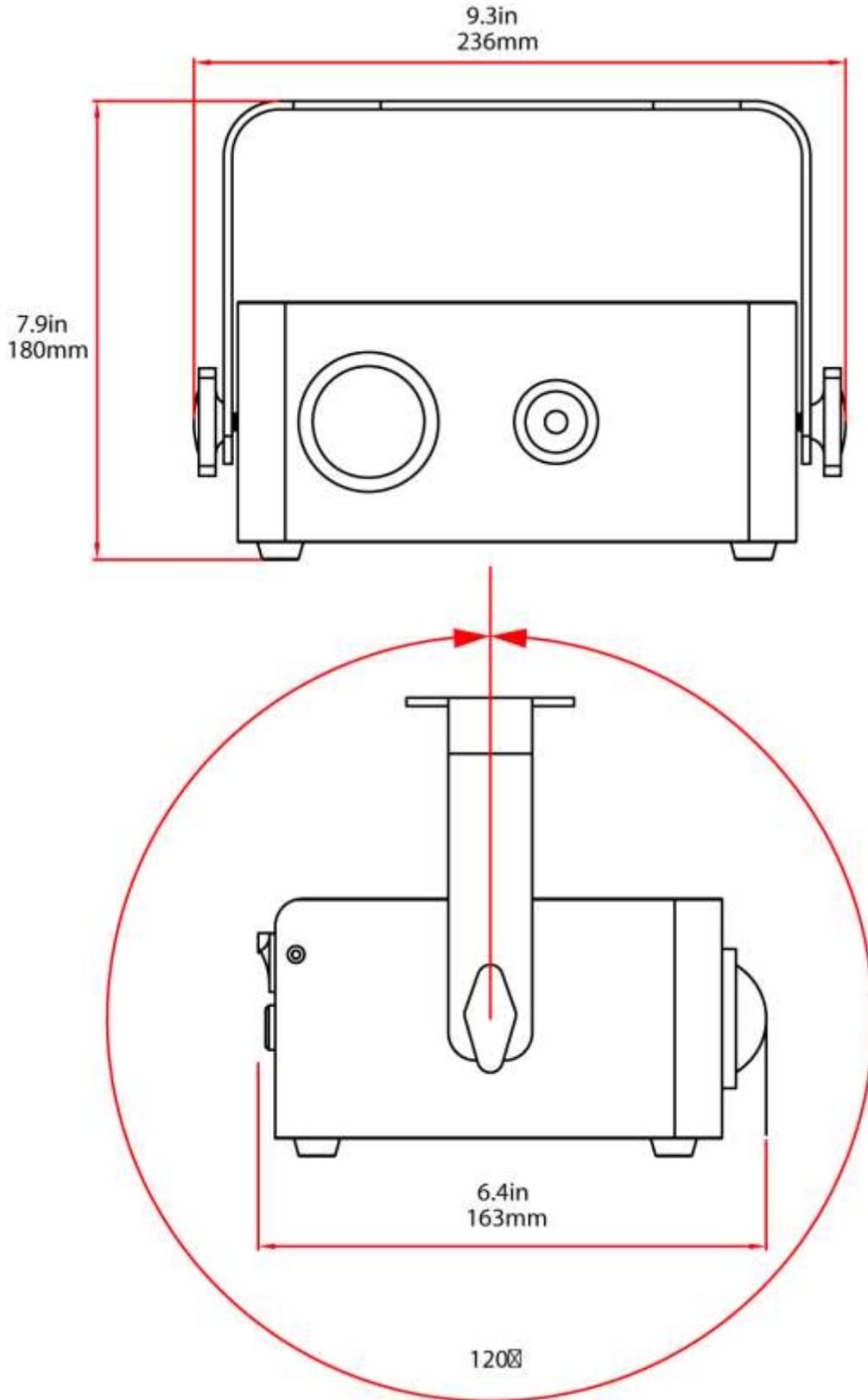
3. SETUP

AC Power

This product has an auto-ranging power supply that can accommodate a wide range of input voltages. The only thing necessary to do before powering on the unit is to make sure the line voltage you are applying is within the range of accepted voltages. This product will accommodate between 100~240V AC 50/60 Hz. All products must be powered directly off a switched circuit and cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch.

Mounting

Orientation

This product may be mounted in any safe position, provided there is adequate room for ventilation.

Rigging

It is important never to obstruct the fan or vents pathway. Mount the product using, a suitable "C" or "O" type clamp. Adjust the angle of the product by loosening both knobs and tilting the product. After finding the desired position, retighten both knobs.

- When selecting installation location, take into consideration access and routine maintenance.
- Safety cables must always be used.
- Never mount in places where the product will be exposed to rain, high humidity, extreme temperature changes or restricted ventilation.

Hanging Clamp
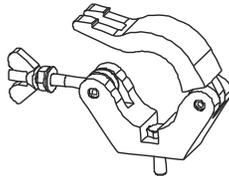
Note!
Clamp is sold separately.

Proper Usage

This product is for overhead mounting only. For safety purposes, CHAUVET® recommends mounting your lighting effect products on steady elevated platforms or sturdy overhead supports using suitable hanging clamps. In all cases, you must use safety cables. You can obtain appropriate mounting hardware from your lighting vendor.

International laser safety regulations require that laser products must be operated in the fashion illustrated below, with a minimum of 3 meters (9.8 ft) of vertical separation between the floor and the lowest laser light vertically. Additionally, 3 meters of horizontal separation is required between laser light and audience or other public spaces.

3 meters
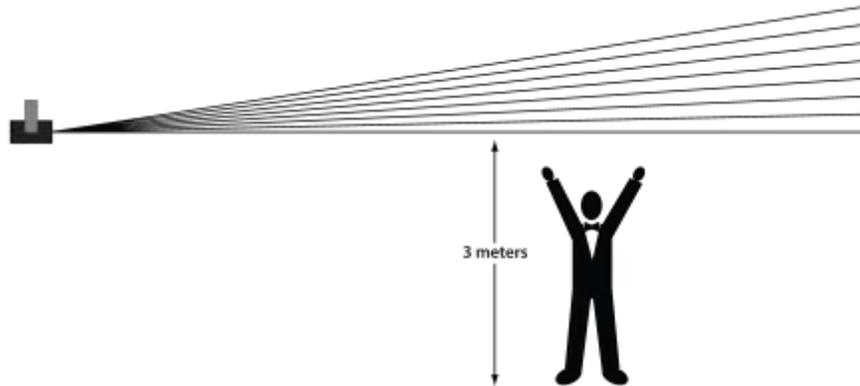
CAUTION - USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE

4. OPERATING INSTRUCTIONS

Control Panel Operation

To access the control panel functions, use the four buttons located underneath the display. Please refer to the Product Overview to see the button locations on the control panel.

Button	Function
<MENU>	Press to find an operation mode or to back out of the current menu option
<UP>	Press to scroll up the list of options or to find a higher value
<DOWN>	Press to scroll down the list of options or to find a lower value
<ENTER>	Press to activate a menu option or a selected value

Menu Map

Mode	Programming Steps		Description
Automatic Programs	**AuF**		Automatic Mode, Fast
	AuS		Automatic Mode, Slow
	Sou		Sound Active Mode
	rdn		Random Effect Mode
Sound Sensitivity	**S 0**	**S 0-S 9**	Adjust sound sensitivity for Sound Active Mode
Manual LED Control	**LEd**	**rgb** (r 0-r 9) (g 0-g 9) (b 0-b 9) (Sr0-Sr9)	Manually adjust the LED color and strobe rate
		FdE (Sp0-Sp9)	Manually adjust the LED color fade speed
DMX Addressing	**001**	**001-509**	Set DMX starting address
Slave Mode	**SLA**		Sets Slave Mode

Configuration (DMX)

Set the product in DMX mode to control with a DMX controller.

1. Connect the product to a suitable power outlet.
2. Turn the product on.
3. Connect a DMX cable from the DMX output of the DMX controller to the DMX input socket on the product.

Starting Address

When selecting a starting DMX address, always consider the number of DMX channels the selected DMX mode uses. If you choose a starting address that is too high, you could restrict the access to some of the product's channels.

The Eclipse™ RGB uses up to 12 DMX channels in its 12-channel DMX mode, which defines the highest configurable address to **500**.

If you are not familiar with the DMX protocol, you may refer to the *DMX Primer* section in the *Technical Information* chapter.

To select the starting address, do the following:

1. Press **<MENU>** repeatedly until **001** shows on the display.
2. Press **<ENTER>**.
3. Use **<UP>** or **<DOWN>** to select the starting address.
4. Press **<ENTER>**.

DMX Channel Assignments and Values

12-CH

Channel	Function	Value	Setting
1	Auto Mode	000 ⇔ 049	DMX Mode
		050 ⇔ 099	Automatic Slow
		100 ⇔ 149	Automatic Fast
		150 ⇔ 199	Sound Active
		200 ⇔ 255	Random Effect
2	Color	000 ⇔ 004	Blackout
		005 ⇔ 028	Red
		029 ⇔ 056	Green
		057 ⇔ 084	Red + Green
		085 ⇔ 112	Red off + Green strobe
		113 ⇔ 140	Red strobe + Green off
		141 ⇔ 168	Red on + Green strobe
		169 ⇔ 197	Red strobe + Green on
		198 ⇔ 224	Red + Green strobe
		225 ⇔ 255	Red + Green alternating strobe
3	Strobe (laser)	000 ⇔ 004	No function
		005 ⇔ 249	Strobe (slow to fast)
		250 ⇔ 255	Strobe (sound active)
4	Rotation (laser)	000 ⇔ 004	No function
		005 ⇔ 127	Clockwise rotation (slow to fast)
		128 ⇔ 133	No function
		134 ⇔ 255	Counterclockwise rotation (slow to fast)
5	Vibration	000 ⇔ 004	No function
		005 ⇔ 255	Vibration (slow to fast)
6	Flash	000 ⇔ 004	No function
		005 ⇔ 255	Flash (slow to fast)
7	Red	000 ⇔ 127	Red
		128 ⇔ 169	Fade in (0%-100%)
		170 ⇔ 209	Fade out (100%-0%)
		210 ⇔ 255	Alternating fade (100%-0%-100%...)
8	Green	000 ⇔ 127	Green
		128 ⇔ 169	Fade in (0%-100%)
		170 ⇔ 209	Fade out (100%-0%)
		210 ⇔ 255	Alternating fade (100%-0%-100%...)
9	Blue	000 ⇔ 127	Blue
		128 ⇔ 169	Fade in (0%-100%)
		170 ⇔ 209	Fade out (100%-0%)
		210 ⇔ 255	Alternating fade (100%-0%-100%...)
10	Dimmer	000 ⇔ 255	0-100%
11	Strobe (LED)	000 ⇔ 004	No function
		005 ⇔ 249	Strobe (slow to fast)
		250 ⇔ 255	Strobe (sound active)
12	Rotation (LED)	000 ⇔ 004	No function
		005 ⇔ 127	Clockwise rotation (slow to fast)
		128 ⇔ 133	No function
		134 ⇔ 255	Counterclockwise rotation (slow to fast)

Configuration (Standalone)

Set the product in one of the standalone modes to control without a DMX controller.
1. Connect the product to a suitable power outlet.
2. Turn the product on.

(i) **Never connect a product that is operating in any standalone mode (either Static, Automatic, or Sound) to a DMX string connected to a DMX controller. Products in standalone mode may transmit DMX signals that could interfere with the DMX signals from the controller.**

Automatic Mode

To enable the Automatic modes, do the following:
1. Press **<MENU>** repeatedly until **AuF, AuS, Sou,** or **rdn** shows on the display.
2. Press **<UP>** or **<DOWN>** to choose **AuF** (for a fast show), **AuS** (for a slow show) or **rdn** (for a random show).
3. Press **<ENTER>**.

Sound Active Mode

To enable the Sound Active mode, do the following:
1. Press **<MENU>** repeatedly until **AuF, AuS, Sou,** or **rdn** shows on the display.
2. Press **<UP>** or **<DOWN>** to choose **Sou**.
3. Press **<ENTER>**.
4. Turn the music on and adjust the microphone sensitivity knob until the product starts responding to the beat of the music.

To adjust the sound sensitivity of the Sound Active mode, do the following:
1. Press **<MENU>** repeatedly until **S 0** shows on the display.
2. Press **<UP>** or **<DOWN>** to choose between no sound activation and high sound activation (**S 0-S 9**).
3. Press **<ENTER>**.

LED Color Mixing

You are able to manually mix the colors and strobe rate of the LED portion of the product. To do so, follow the steps below:
1. Press **<MENU>** repeatedly until **LEd, rGb,** or **FdE** shows on the display.
2. Press **<UP>** or **<DOWN>** to choose **rGb**.
3. Press **<ENTER>**.
4. Press **<UP>** or **<DOWN>** to adjust between full off and on for red (**r 0-r 9).**
5. Press **<ENTER>**.
6. Press **<UP>** or **<DOWN>** to adjust between full off and on for green (**G 0-G 9).**
7. Press **<ENTER>**.
8. Press **<UP>** or **<DOWN>** to adjust between full off and on for blue (**b 0-b 9).**
9. Press **<ENTER>**.
10. Press **<UP>** or **<DOWN>** to adjust the strobe rate (**Sr0-Sr9).**
11. Press **<ENTER>**.

LED Color Fading

You are able to manually adjust the fade speed of the LED portion of the product. To do so, follow the steps below:
1. Press **<MENU>** repeatedly until **LEd, rGb,** or **FdE** shows on the display.
2. Press **<UP>** or **<DOWN>** to choose **FdE**.
3. Press **<ENTER>**.
4. Press **<UP>** or **<DOWN>** to adjust the fade speed between slow and fast (**SP0-SP9**).
5. Press **<ENTER>**.

Master/Slave Mode

The Master/Slave mode allows a single Eclipse™ RGB unit (the "master") to control the actions of one or more Eclipse™ RGB units (the "slaves") without the need of a DMX controller. The master unit will be set to operate in either Automatic or Sound Active mode, while the slave units will be set to operate in Slave Mode. Once set and connected, the slave units will operate in unison with the master unit.

Configure the units as indicated below.

Slave units:

1. Press **<MENU>** repeatedly until **SLA** shows on the display.
2. Press **<ENTER>** to accept.
3. Set the DMX address to **001**.
4. Connect the DMX input of the first slave unit to the DMX output of the master unit.
5. Connect the DMX input of the subsequent slave units to the DMX output of the previous slave unit.
6. Finish setting and connecting all the slave units.

Master unit:

1. Set the master unit to operate in either Automatic or Sound mode.
2. Make the master unit the first unit in the DMX daisy chain.

- **Configure all the slave units before connecting the master unit to the DMX daisy chain.**
- **Never connect a DMX controller to a DMX string configured for Master/Slave operation because the controller may interfere with the signals from the master unit.**
- **Do not connect more than 31 slave units to the master unit.**

- **The lasers cannot be turned off. They can be set to a slow strobe.**
- **At higher rotation speeds, the operation noise may increase from the product. This is normal.**

General Troubleshooting

Symptom	Solution(s)	Applies to			
		Lights	Foggers & Snow	Controllers	Dimmers & Chaser
Breaker/Fuse keeps blowing	Check total load placed on device				✓
Chase is too slow	Check users manual for speed adjustment	✓		✓	✓
Device has no power	Check for power on Mains. Check device's fuse. (internal and/or external)	✓		✓	✓
Loss of signal	Use only DMX cables Install terminator Note: Keep DMX cables separated from power cables or black lights.	✓	✓	✓	✓
No laser output	Bounce mirror motor may have shifted during shipping; readjust	✓			

If you still have a problem after trying the above solutions, please contact CHAUVET Technical Support.

Returns Procedure

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Merchandise Authorization Number (RMA #). Products returned without an RMA # will be refused. Call CHAUVET and request RMA # prior to shipping the product. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack product, any shipping damage resulting from inadequate packaging is the customer's responsibility. CHAUVET reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Note: **If you are given an RMA #, please include the following information on a piece of paper inside the box:**

1. Your name
2. Your address
3. Your phone number
4. The RMA #
5. A brief description of the symptoms

Contact Information

World Headquarters

CHAUVET®

General Information

Address:	5200 NW 108th Avenue
	Sunrise, FL 33351
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Fax:	(954) 929-5560
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Voice:	(954) 929-1115 (Press **4**)
Fax:	(954) 756-8015

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United Kingdom & Ireland

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	Pinxton, Nottingham, UK
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Fax:	+44 (0)1773 511110
Email:	uktech@chauvetlighting.com

World Wide Web
www.chauvetlighting.co.uk

Technical Specifications

WEIGHT & DIMENSIONS
Length.. 7.7 in (196 mm)
Width .... 9.5 in (241 mm)
Height .... 6.4 in (162 mm)
Weight .... 3.7 lbs (1.7 kg)

POWER
Autoswitching power supply ....100-240 VAC 50/60 Hz
Fuse... T 1 A 250 V (slow-blow)
Power Consumption...43 W (0.4 A) max @ 120 V
Power Consumption...49 W (0.6 A) max @ 230 V
Power Output .... 22 units max @ 120 V, 42 units @ 230V

LIGHT SOURCE
LED...8W 700 mA (tri-color) 50,000 hrs

LASER
Green diode ....532 nm 40 mW
Red diode ....650 nm 100 mW
Laser Type...DPSS
Cooling .... Fan Cooled

RANGE
Coverage Angle .... 70°

THERMAL
Maximum ambient temperature... 104° F (40° C)

ORDERING INFORMATION
Eclipse™ RGB .... ECLIPSERGB

WARRANTY INFORMATION
Warranty .... 2-year limited warranty